DOCUMENT RESUME

ED 365 735 TM 020 980

AUTHOR Crone, Linda J.; And Others
TITLE An Examination of Attendance in Louisiana Schools.
PUB DATE Nov 93
NOTE 20p.; Paper presented at the Annual Meeting of the Mid-South Educational Research Association (22nd, New Orleans, LA, November 10-12, 1993).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Academic Achievement; Achievement; *Attendance; Black Students; Dropout Rate; Educational Environment; Elementary Secondary Education; *High Risk Students; Low Income Groups; Parent Attitudes; Prediction; Profiles; *Public Schools; Scores; *Socioeconomic Status; Tables (Data); *Test Results; Urban Schools; White Students
IDENTIFIERS African Americans; Graduation Exit Exam LA; *Louisiana

ABSTRACT

Research results appear inconclusive as to the relationship of student attendance to student achievement, although most practitioners cite increased student attendance as an extremely desirable school outcome. The purpose of the examination of student attendance in the Louisiana public schools was twofold: (1) to determine the relationship of attendance to other school variables, especially to test data; and (2) to identify and describe those schools which had the most problems with attendance, in order to provide a profile of the schools that are potentially at-risk due to poor attendance. Results indicated that student attendance in Louisiana public schools is an important indicator of the academic success of a school. Attendance yielded very high relationships to assessment instruments, and was the strongest predictor of percent passing for the Graduation Exit Exam. There were also strong negative relationships between attendance and suspension, expulsion, and dropout rates. As Monk and Ibrahim reported (1984), this study confirms that low attendance rates for a school should be a concern of all parents in the school. The characteristics of schools with low attendance rates were (1) schools in metropolitan areas, (2) middle and secondary schools, and (3) schools with low socioeconomic status. Results indicated that Caucasian students in these schools had even more problems with low attendance than the African American students. Six figures (graphs) and four tables are included. (Contains 15 references.) (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 365 735

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

LINDA CRONE

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

AN EXAMINATION OF ATTENDANCE IN LOUISIANA SCHOOLS

Linda J. Crone

Catherine H. Glascock

Bobby J. Franklin

Susan E. Kochan

Louisiana Department of Education
Baton Rouge, Louisiana

Paper presented at the annual meeting of the Mid-South Educational Research Association, New Orleans, Louisiana, November 10-12, 1993.

TM020980

BEST COPY AVAILABLE

ABSTRACT

Research results appear inconclusive as to the relationship of student attendance to student achievement, although most practitioners cite increased student attendance as an extremely desirable school outcome. The purpose of the examination of student attendance in the Louisiana public schools was twofold: (a) to determine the relationship of attendance to other school variables, especially to test data; and (b) to identify and describe those schools which had the most problems with attendance, in order to provide a profile of the schools that are potentially at-risk due to poor attendance.

Results indicated that student attendance in Louisiana public schools is an important indicator of the academic success of a school. Attendance yielded very high relationships to assessment instruments, and was the strongest predictor of percent passing for the Graduation Exit Exam. There were also strong negative relationships between attendance and suspension, expulsion, and dropout rates. As Monk and Ibrahim reported (1984), this study confirms that low attendance rates for a school should be a concern of all parents in the school.

The characteristics of schools with low attendance rates were (a) schools in metropolitan areas, (b) middle and secondary schools, and (c) schools with low socioeconomic status. Results indicated that the Caucasian students in these schools had even more problems with low attendance than the African-American students.

A STUDY OF ATTENDANCE IN LOUISIANA PUBLIC SCHOOLS

Introduction

The Louisiana Department of Education (LDE), Bureau of School Accountability is starting its fourth year of production of school report cards (*Progress Profiles*). In order to better serve the audience for whom these reports were intended (the parents), focus groups were held to illicit the opinions of parents as to how useful the reports were and how easy they were to understand. One question asked of parents was what they would consider the most and least useful information on the reports. Student attendance was quite often cited as being the least important. Other information included faculty information, class size, suspensions, expulsions, and dropout. The parents who participated in the focus groups expressed the feeling that as long as they got **their** children to school, the overall attendance of the school was not that important to them. The LDE felt that attendance was important; hence, a study of student attendance in Louisiana was conducted in order to respond to this issue.

High student attendance has often been mentioned as a desirable indicator of school effectiveness (Edmonds, 1979; Schrader, 1991; Sweeney, 1992), yet very little literature has been found that provides research to support the assumption that attendance is important to other school outcomes. Also, very little analysis was found to provide insight as to the characteristics of schools where low attendance creates a potential for students being at-risk.

The literature is full of advice from practitioners (Dowdle, 1990; Hegner, 1987; Martin, 1991) providing programs to improve attendance. The actual research, though, that was found on attendance is somewhat sparse and inconclusive. Rozell (1968) found rather low correlations between student attendance and grades in high school courses. Porwell (1977) concluded that student outcomes were significantly related to both student time-on-task and school attendance. Easton and Engelhard also reported finding significant relationships between attendance and both teacher-assigned reading grades and standardized test results.

In reference to parents' apparent lack of concern about attendance, Monk and Ibraham (1984) contended that students who attend class can be adversely affected by those who are absent. They argued was that the more students are absent from class, the more time the teacher must devote to remediating those students who missed. Hence, new learning opportunities cannot be provided to those who are consistently present.

Due to the lack of conclusive research, it was felt that a thorough analysis of attendance in Louisiana might help to judge the importance of this variable as an indicator of school effectiveness. If attendance were shown to be strongly related to outcome variables (achievement test data), then it was felt important to provide a profile of the demographic,

socioeconomic, and racial makeup of those schools that most need to improve in the area of attendance. The study had two purposes:

1. To examine the relationship of attendance to other school variables, especially to test data, in order to assess the importance of attendance as an indicator of school effectiveness.

2. To identify and describe those schools which had the most problems with attendance, in order to provide a profile of the schools and students who are potentially at-risk due to poor attendance.

Methods

Data Files

The data for this report was obtained from computer files maintained by the Louisiana Department of Education (LDE). Data was taken from the Attendance portion of the Numeric Data Collection System (NDC) and the files used to produce the *Progress Profiles* for Louisiana schools. Data from both sources were obtained for the 1990-91 and 1991-92 school years.

Definitions

Percent of Student Attendance: The ratio of aggregate days student attendance to aggregate days of membership.

Aggregate Days Attendance: The sum of the total number of days that students are present at the school site over the course of the school year. These figures are reported by student grade and race to the LDE Bureau of School Accountability by all public schools in the state.

Aggregate Days Membership: The sum of the total number of days that students are enrolled (but not necessarily present at the school site) over the course of the school year. These figures are reported by student grade and race to the LDE Bureau of School Accountability by all public schools in the state.

LEAP Percent Passing: The portion of the Louisiana Educational Assessment Program (LEAP) used for this study was the criterion-referenced test given in grades 3, 5, & 7 and the Graduation Exit Exam (GEE). The percent passing was computed by dividing the number of regular education first-time test takers who passed the test by the total number of regular education first-time test takers.

Socioeconomic Level: This was estimated by using the percent of students in each school receiving free lunch. The number of students receiving free lunch is reported by the schools to the LDE Office of Food and Nutritional Services. The percent of students

receiving free lunch was computed by dividing the number of students receiving free lunch per school by the total membership of the school.

Percent of Students Suspended and Expelled: This data was reported to the LDE Bureau of Student Services by all public schools in the state. The percentages were calculated by dividing the total number of students suspended or expelled by the cumulative enrollment of the overall school population (Kennedy, 1993).

Percent of Dropouts: This data was reported to the LDE Bureau of Student Services by all public schools in the state. The percent of dropouts was calculated by dividing the total number of student dropouts by the cumulative enrollment of the overall school population.

Community Type: The communities within which schools are located were classified on the basis of population characteristics (Caldas, Killebrew, Ducote, Franklin, & Crone, 1992/93). The classifications were as follows :

City/Town:	An area that is not a metropolitan core city or urban fringe with a minimum population of 2,500 inhabitants (e.g., Houma).
Metropolitan:	A city determined by the U.S. Office of Management and Budgets to be a social and economic hub of a metropolitan statistical area with a minimum population of 25,000 inhabitants (New Orleans, Baton Rouge, Shreveport, Alexandria, Lafayette, Monroe, and Lake Charles).
Rural:	An area with 2,500 inhabitants or fewer (e.g., Choudrant).
Urban:	The closely-settled area contiguous to a metropolitan core city with a minimum population of 2,500 inhabitants (e.g. Metairie).

School Type: This was determined by the grade configuration of a school (Caldas, et al., 1992/93). Schools were classified as follows:

Primary:	Schools which serve only students below grade 3.
Elementary:	Schools with 50% or more of their grade levels at or below grade 6, and excluding those schools classified as primary.
Middle:	Schools with 50% or more of their grade levels within the span of grades from 5 through 9, and which have either grade 7 or grade 8.

Secondary: Schools with 50% or more of their grade levels at or above grade 9.

Combination: Schools serving the span of grades K-12 or any such broad range that provides instruction at the elementary, middle, and high school levels.

Analysis

All students attending schools that received *Progress Profiles* in Louisiana were included in this study. The only schools excluded were alternative and special education schools for which the majority of the data was missing. Hence, the entire population of regular education students was included in this study. The statistics used were descriptive, utilizing counts, percentages, and means. Pearson Correlation and Regression procedures were also used to examine the relationships between attendance and other variables.

Results

Attendance and Assessment Instruments

Attendance was found to have a strong association with all LEAP (grades 3, 5, 7, and GEE) attainment rates. For the Graduation Exit Examination (GEE) portion of the LEAP, attendance showed a stronger relationship to the school-level percent passing than any other school variable (including socioeconomic indicators). In a forward stepwise regression predicting the GEE percent passing, attendance was the first variable to be entered in the model, followed by percent African-American students and school size (R^2=.70). Table 1 shows the standardized regression coefficients between each criterion variable and its most highly correlated predictor variables. Although percent African-American students was the first variable to be entered in the forward stepwise regression predicting all LEAP scores (grades 3,5,7, and GEE), the standardized regression coefficients indicate that attendance rates yielded the strongest independent relationship (partial correlation) of all predictor variables (Table 1). With the other variables entered in the model for the overall LEAP attainment rates, R^2 was .66.

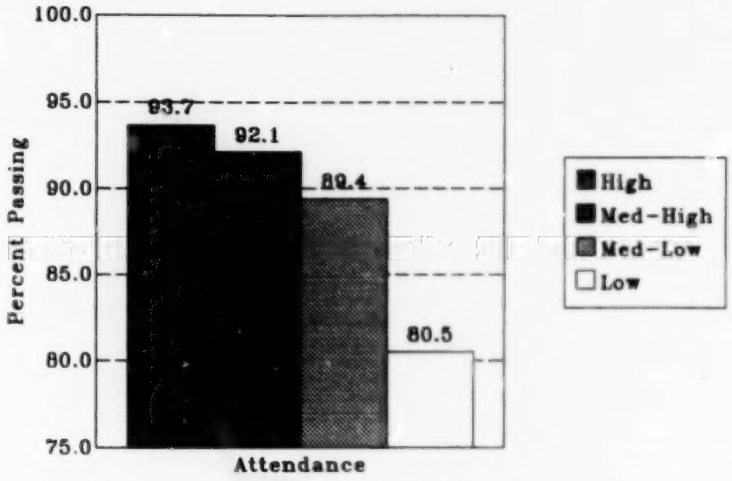
Table 1

Standardized Regression Coefficients of LEAP Test Scores with strongest predictor variables.

LEAP Percent Passing	Strongest Predictor Variables	Standardized Regression Coefficients
Graduation Exit Exam	Percent Attendance	.59
	Percent African-American	-.39
	School Size	.08
Grades 3,5,7, and GEE	Percent African-American	-.30
	Percent Attendance	.47
	Interaction of Community Type and % African-Am	-.13
	Percent Free Lunch	-.18

When all schools in the state were divided into four quarters according to the percent of attendance, the difference between the percent passing for the quarter with the highest attendance and the quarter with the lowest attendance is 13% (Figure 1). The quarter with the lowest attendance had approximately 33,400 more students failing the LEAP tests (grades 3, 5, 7, and GEE) than the quarter with the highest attendance. When comparing schools in the medium high attendance category to schools in the medium low attendance category (which had a one percent difference in the percent attendance), there was a difference of 2.7% passing the LEAP. In other words, schools with medium low attendance had approximately 5,700 more students failing the LEAP than the schools with medium high attendance.

Although student attendance yielded the strongest relationship to the state criterion-referenced test data, Pearson correlation coefficients also showed strong relationships between attendance and both ACT and California Achievement Test (CAT) scores. School average ACT composite scores had a .44 correlation with average attendance. An overall school average CAT score, which was administered to grades 4, 6, and 9, yielded a correlation of .45 to the school-level average attendance rates.



Note. High Attendance includes schools with attendance of greater than 95.7%.
Med-High Attendance includes schools with attendance of 94.8%-95.7%.
Med-Low Attendance includes schools with attendance of 93.3%-94.7%.
Low Attendance includes schools with attendance of less than 93.3%.

Figure 1: 1991-92 Louisiana public schools containing grades 3, 5, 7, 10, or 11: A comparison of average percent attendance to average percent passing the LEAP.

Attendance, Suspensions/Expulsions, and Dropouts

There was also a strong negative relationship between attendance and suspension (r=-.43), expulsion (r=-.44), and dropout rates (r=-.44) for public schools in Louisiana. In other words, as attendance rates went down, suspension, expulsion, and dropout rates went up. This finding agrees with the recent finding of Kennedy (1993) who reported that suspensions in the upper grades increased due to student attendance problems.

Attendance and Community Type

When comparing attendance rates for the different community types, results of analysis showed that the schools in the metropolitan areas had lower attendance than schools in any other area (Table 2). There were no major differences in attendance between rural, city/town, or urban fringe schools. Metropolitan schools, though, were different from the other three community type schools. This may appear to be a small difference when looking at an attendance rate of 94.6 compared to 93.1, but if all students in the state improved their attendance by 1.5% there would be approximately 2 million more days of school attended per school year.

Table 2

Average percent attendance by community type for 1991-92 Louisiana public schools.

	Community Type			
	Rural	City/Town	Urban Fringe	Metropolitan
Percent Attendance	94.6	94.0	94.4	93.1

Note. The following are the number of students enrolled in schools in each community type: Rural-188,735; City/Town-229,797; Urban Fringe-90,867; Metropolitan-225,173.

Attendance by School Type

When examining attendance by school type, it was found that secondary schools had the lowest attendance (Table 3), with middle schools also having lower attendance than primary, elementary, or combination schools. Elementary schools had the highest attendance of all schools types. Secondary attendance was 3.5% less than elementary attendance. This could be roughly interpreted as a difference between a student missing 8.7 days in a year (elementary schools) to a student missing 15.0 days in a year (secondary schools).

Table 3

Average percent attendance by school type for 1991-92 Louisiana public schools.

	School Type				
	Primary	Elementary	Middle	Secondary	Combination
Percent Attendance	94.0	95.1	93.0	91.6	94.1

Note. The following are the number of students enrolled in schools in each school type: Primary-14,233; Elementary-362,596; Middle-134,371; Secondary-186,477; Combination-36,638.

Attendance by School SES

When dividing the schools into quarters according to SES levels (Table 4), it was found that the low SES group had lower attendance (approximately 1% lower than the high or medium high groups).

Table 4

Average percent attendance by socioeconomic group (percent free lunch) for 1991-92 Louisiana public schools.

	Socioeconomic Group			
	High	Medium High	Medium Low	Low
Percent Attendance	94.3	94.4	94.0	93.4

Note. The following are the number of students enrolled in schools in each SES category: High-235,653; Medium High-180,270; Medium Low-162,547; Low-155,845.

The findings of attendance and its relationship to test scores, school type, and SES levels are consistent with results of analysis conducted on the 1990-1991 data (Franklin & Crone, 1993).

Attendance by Ethnicity

Figure 2 shows the average percent attendance by ethnicity for all students in all 1,388 schools for which Profiles were provided in Louisiana. There were very little differences found in overall attendance for Caucasians, African-Americans, or Hispanics. However, American Indians had slightly lower attendance rates than other ethnic groups, and Asians had much higher rates than any other ethnicity.

As Hispanics (1%), American Indians (.4%) and Asians (1%) constitute such a small percentage of the population, subsequent analysis was done on Caucasians and African-Americans only.

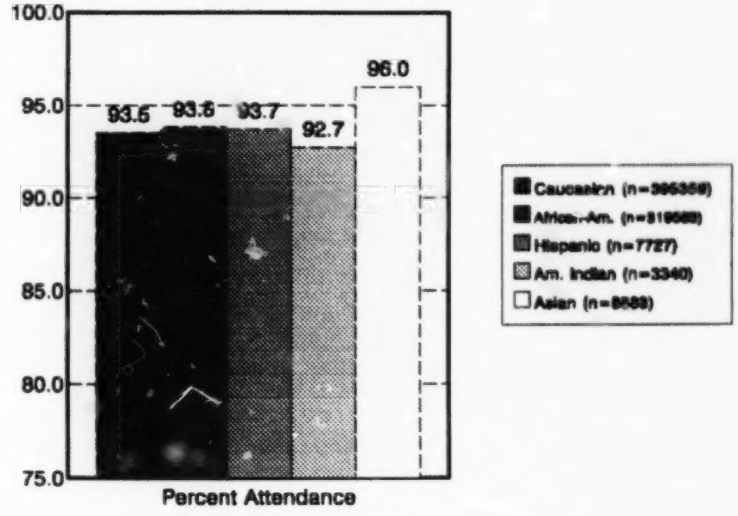


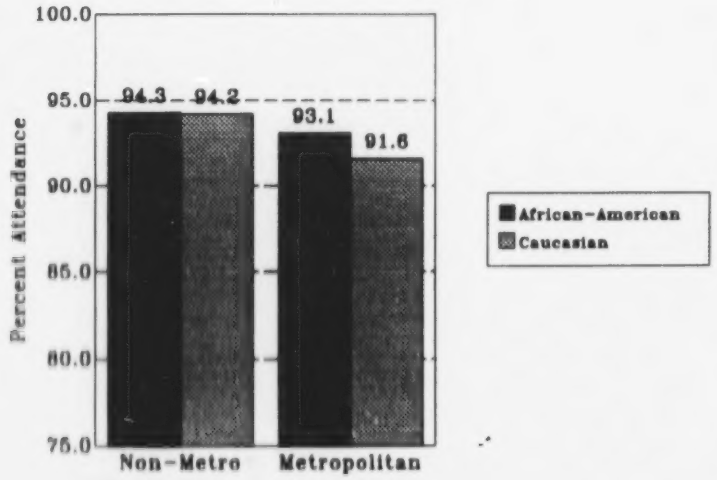
Figure 2: A comparison of average percent attendance by ethnicity for 1991-92 Louisiana public schools.

Attendance by Ethnicity and School Type

When comparing Caucasian attendance to African-American attendance within the different school types, no differences were found. In other words, in secondary schools there were no differences in attendance of Caucasian students versus attendance of African-American students. Nor were there any differences between the two ethnic groups when comparing their attendance in primary, elementary, middle, or combination schools.

Attendance by Ethnicity and Community Type

Figure 3 shows a comparison of attendance rates for African-Americans and Caucasians in non-metropolitan schools versus schools in metropolitan areas (as the only differences found were in the metropolitan areas, community type was separated into non-metropolitan and metropolitan). The average percent attendance dropped in the metropolitan areas for both ethnic groups, but the drop in Caucasian attendance was much greater than the drop in African-American attendance (i.e., 2.6% for Caucasians, 1.2% for African Americans).

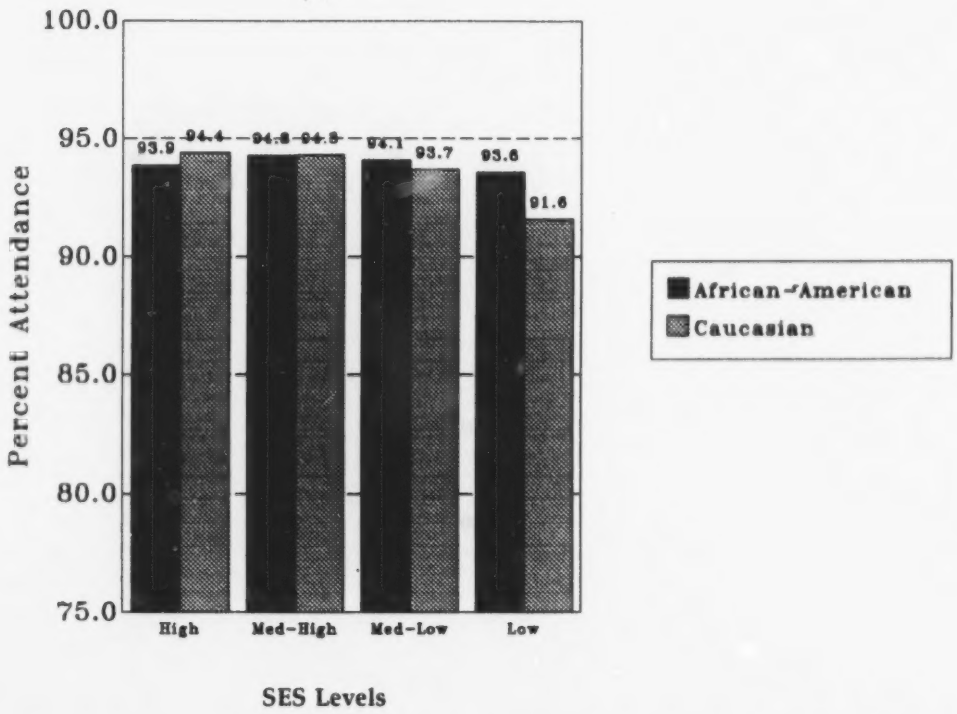


Note. Non-Metropolitan schools contain 171,794 Afr-American and 323,458 Caucasian students. Metropolitan schools contain 147,753 Afr-American and 71,884 Caucasian students.

Figure 3: A comparison of average percent attendance by ethnicity and community type for 1991-92 Louisiana public schools.

Attendance by Ethnicity and SES

Figure 4 compares attendance rates for the two ethnic groups separated according to their socioeconomic status (SES). There was very little difference in the percent attendance for African-Americans in the four different SES groups (i.e., a range of 94.3% to 93.6 percent for African-American attendance), but the attendance for Caucasian students dropped from 94.4 in the high SES schools to 91.6 in the low SES schools.

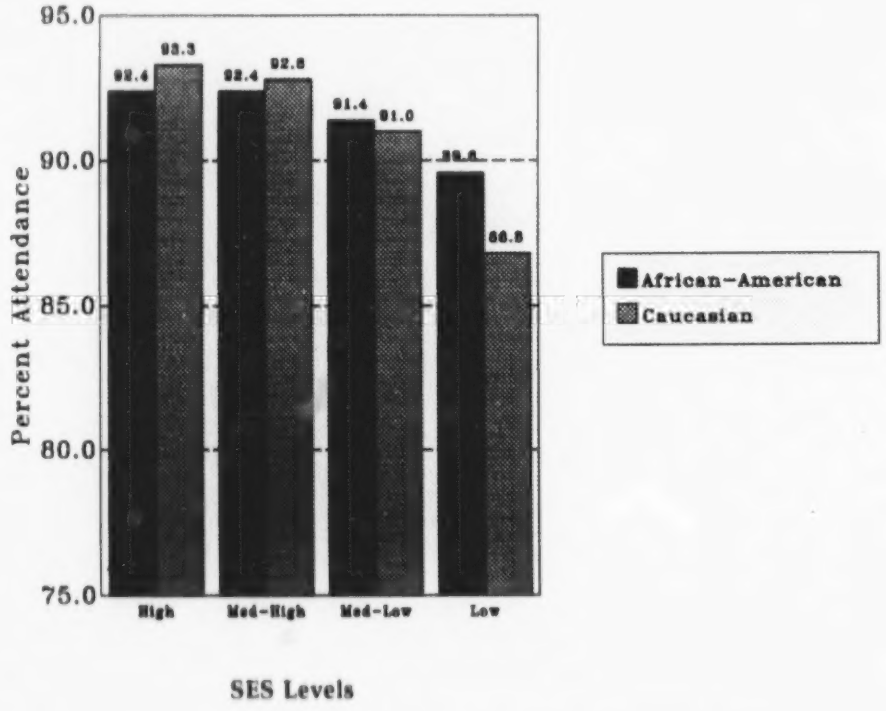


Note. The following is the number of students by ethnicity enrolled in schools in the four SES levels:
African-Americans: High=50,913; Med-High=58,258; Med-Low=82,113; Low=128,063.
Caucasians: High=179,397; Med-High=116,692; Med-Low=75,260; Low=23,993.

Figure 4: A comparison of average percent attendance by ethnicity and socioeconomic status for 1991-92 Louisiana public schools.

Secondary/middle School Attendance by Ethnicity and SES

Since the analysis showed that secondary/middle schools had lower attendance than other school types, Figure 5 presents the results of comparisons of attendance for Caucasians and African-Americans by SES group for secondary/middle schools only. These two groups are combined since there were not enough schools in each cell (secondary by SES group, or middle by SES group) to make valid conclusions about the results. Caucasian attendance again dropped more than African-American attendance as the SES level dropped. Whereas the attendance for African-American students dropped 2.8% between high SES schools and low SES schools, the attendance for Caucasians dropped 6.5% between those two SES levels. Note that the number of African-American students remains relatively consistent across the four SES levels, but the number of Caucasians students is much greater in the high SES schools and declines for each SES level.

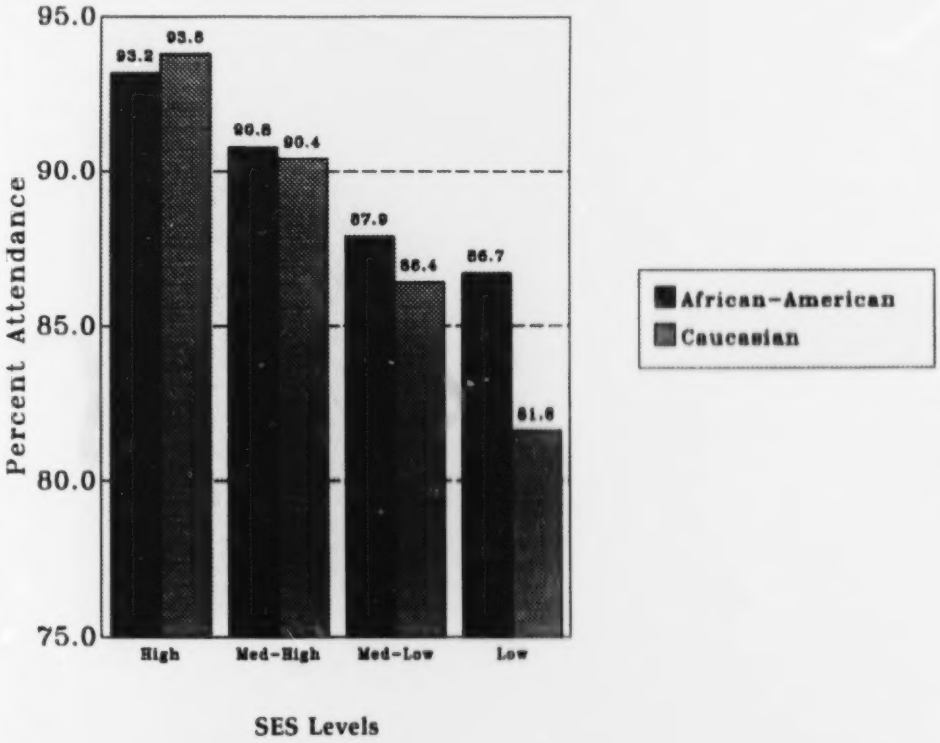


Note. The following is the number of Sec/Middle School Students by ethnicity for the SES levels:
African-American: High=37,893; Med-High=33,129; Med-Low=37,323; Low=30,112.
Caucasian: High=108,048; Med-High=42,164; Med-Low=18,506; Low=4,430.

Figure 5: A comparison of average percent attendance by ethnicity and socioeconomic status for 1991-92 Louisiana secondary/middle public schools.

Secondary/middle Metropolitan School Attendance by Ethnicity and SES

As metropolitan schools were also found to have lower overall attendance, the percent attendance for the two ethnic groups was also examined for metropolitan secondary/middle schools within the four SES levels. A similar drop occurred when looking at this group of students (Figure 6). Here one sees the most drastic drop in attendance for both ethnic groups; but again the Caucasians in metropolitan, low SES, middle and secondary schools showed the lowest attendance rates. Caucasian attendance dropped 12% between the high SES group of schools to the low SES group of schools. Whereas African-American attendance dropped 6.5% between the same two SES groups. (When examining the Asian attendance for these groups, a similar pattern to that of the Caucasian students occurred, i.e. Asian attendance dropped 9% between high and low SES secondary/middle metropolitan schools.)



Note. The following is the number of Metropolitan, Sec/Mid school students in each SES level:
Afr-American: High=15,173; Med-High=13,187; Med-Low=18,503; Low=20,147.
Caucasian: High=27,917; Med-High=6,666; Med-Low=2,145; Low=704.

Figure 6: A comparison of average percent attendance by ethnicity and socioeconomic status for 1991-92 Louisiana secondary/middle public schools located in metropolitan areas.

Analysis was also done on the 1990-91 attendance data by ethnicity, school type, community type and SES. Similar results were found to those reported above.

Conclusions and Recommendations

Considering the relationships of overall school attendance rates to other school variables, especially assessment data and dropouts, it appears that attendance is extremely important as an indicator of school effectiveness. As Monk and Ibrahim reported (1984), low attendance rates for a school should be a concern of all parents in the school.

In conclusion, the characteristics of schools with low attendance rates are listed below:

1. Schools in metropolitan areas,
2. Middle and secondary schools,
3. Low SES schools.

When the lowest attendance found in all three categories are combined, it was concluded that the students that have the ***greatest*** potential for being at-risk due to poor attendance are students in metropolitan, low SES, secondary and middle schools. Results indicate that the Caucasian students in these schools have even more problems with low attendance than the African-American students. Although these results seem somewhat surprising, they are consistent with findings of Glascock and Tashakkori (1993) who reported that when Caucasian students became the minority, their self-esteem dropped significantly.

Further research, conducting a thorough examination of attendance by school size, would be recommended. This would need to be done within the categories of community type and school type. This study did find that when looking at all schools within the state, the larger schools had lower attendance. This though could be simply a function of the fact that the larger schools are usually secondary and metropolitan schools. As both of those schools types have lower attendance, no conclusions could be reached concerning school size. To determine if size has any affect on schools, one would need to examine attendance for different sizes of metropolitan schools, or for different sizes of secondary/middle schools.

This study did not attempt to suggest ways of improving poor attendance. Research findings, though, suggest that attendance is associated with the overall climate (both physical and emotional atmosphere) of the school. If the school is pleasant and orderly, with good discipline and strong leadership, where students are encouraged to excel, and given positive reinforcement (Crone, Chapter 2, 1992), it stands to reason that students are going to have more desire to attend.

Hence, there is no easy solution to improving attendance rates. It would be recommended, though, that exceptional schools be identified (i.e., schools that are in the

categories which were found to have low attendance, but that have better attendance rates than the other schools within those particular categories). On site visits could be made to those schools in order to identify the characteristics that may be contributing to better attendance. Workshops could then be provided to those schools with low attendance. It would be recommended that the schools with high attendance rates actually conduct the workshops, sharing with other schools the solutions that they have found.

REFERENCES

Caldas, S.J., Killebrew, C., Ducote, J.M., Franklin, B.J., and Crone, L. (1992/93). Building a statewide school categorization model using socioeconomic, demographic, and education variable. Louisiana Education Research Journal, 18(2), 9-22.

Crone, L.J. (1992). The methodological issues of variance in teacher behavior and student achievement: The relationship of variance to school and teacher effectiveness. Unpublished Doctoral dissertation. Louisiana State University.

Dowdle, J.M. (1990). Keeping Kids in School. North Central Association Quarterly, 64, 470-472.

Easton, J.Q., and Engelhard, Jr., G. (1982). A Longitudinal Record of Elementary School absence and its relationship to reading achievement. The Journal of Educational Research, 75(5), 269-274.

Edmonds, R.R. (1979). Effective schools for the urban poor. Educational Leadership, 37, 15-24.

Franklin, B.J., and Crone, L.J. (April, 1993). Louisiana Progress Profiles. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA.

Glascock, C. H., and Tashakkori, A. (January, 1993). Minority make up of schools and its relationship with student self esteem. Paper presented at the Southwestern Educational Research Association, Austin, TX.

Hegner, M. (1987). Absentee prevention-a model for intervention. NASSP Bulletin, 71, 125-126.

Kennedy, E. (1993). A study of out-of-school suspensions and expulsions in Louisiana public schools. Paper prepared under Contract with the Louisiana Department of Education.

Martin, L.D. (1991). Improving student attendance with recognition, rewards. NASSP Bulletin, 75, 111-112.

Monk, D.H., and Ibrahim, M.A. (1984). Patterns of Absence and Pupil Achievement, American Educational Research Journal, 21(2), 295-310.

Porwell, P.J. (1977). Student Absenteeism. Arlington, Virginia: Educational Research Services, 1977.

Rozelle, R.M. (1968). The relationship between absenteeism and grades. Educational and Psychological Measurement, 28, 1151-1158.

Schrader, V.E. (1991). Rewarding improvement: The effect of cash incentive awards on Indiana schools. Contemporary Education, 62(4), 266-272.

Sweeney, J. (1992). School climate: The key to excellence. NASSP Bulletin, 76(547), 69-73.